

Certificate of Compliance

Certificate Number:

E332730

Report Reference:

E332730-2025-07-02

Issue Date:

2025-07-02

Issued to:

**SHANGHAI AMP&MOONS' AUTOMATION CO.,LTD
Room 7107, 1st Floor, Building 109, No. 1-30
Lane 88, Minbei Road, Minhang District
Shanghai 201107 CN**

This certificate confirms that representative samples of:

**FUNCTIONAL SAFETY PRODUCT MARK CERTIFICATION
SCHEME**

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.

See Addendum Page for Standard No. & Title

Additional Information:

See UL Product iQ® at <https://iq.ulprospector.com> for additional information.

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



David Piecuch
UL Mark Certification Program Manager



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact UL Solutions Customer Service at <https://www.ul.com/contact-us>.

CERTIFICATE OF COMPLIANCE

Certificate number E332730
Report reference E332730-2025-07-02
Date 2025-07-02

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

The evaluated safety function is Safe Torque Off (STO) function, which is for DC step drive Models STF, followed by 05 or 10, followed by -2XU, -4X, -4XU or blank, followed by -C, -D, -R, -EC, -ECX, -IP or -PN, may be followed by -H, -HS, -J, -JS, -MW01, -S or blank, maybe followed by -FC or blank, followed by -XXXXXX, where "X" represents from 0 to 9 or A to Z or blank or -.

DC step drive Models SSDC, followed by 03, 06 or 10, followed by -2XU, -4X, -4XU or blank, followed by -A, -C, -D, -R, -EC, -ECX, -IP or -PN, may be followed by -H, -HS, -J, -JS, -MW01, -S or blank, maybe followed by -FC or blank, followed by -XXXXXX, where "X" represents from 0 to 9 or A to Z or blank or -.

Investigated to Listed products investigated to IEC 61508/ UL 61800-5-2/ IEC 61800-5-2:

Model	Safety Integrity Level	Hardware Fault Tolerance (HFT)	Safe Failure Fraction (SFF)	Proof Test Interval	PFH	Diagnostic Coverage (DC)	CCF - Beta Factor
STF Series and SSDC Series	SIL 3	1	99.8%	10 years	1.66E-11	99%	5%

Investigated to Listed products investigated to ISO 13849-1:

Model	Performance Level [Structure]	DC - Diagnostic Coverage	MTTFd (Years)	PFH	CCF - Common Cause Failure (Score)
STF Series and SSDC Series	PL e [Cat 4]	99% (High)	2500	9.06E-10	65

Standards for Safety:



David Piecuch
 UL Mark Certification Program Manager

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact UL Solutions Customer Service at <https://www.ul.com/contact-us>.



CERTIFICATE OF COMPLIANCE

Certificate number E332730
Report reference E332730-2025-07-02
Date 2025-07-02

Standard	Title	Edition	Revision Date
UL 61800-5-2	Adjustable Speed Electrical Power Drive Systems - Part 5-2: Safety Requirements - Functional	Edition 2	Issue Date 05/03/2022
IEC 61800-5-2	Adjustable Speed Electrical Power Drive Systems - Part 5-2: Safety Requirements - Functional	Edition 2	Issue Date 04/2016
IEC 61508-1	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 1: General requirements	Edition 2	Issue Date 05/2010
IEC 61508-2	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems	Edition 2	Issue Date 05/2010
ISO 13849-1	Safety of Machinery – Safety-Related Parts of Control Systems – Part 1: General Principles for Design	Edition 4	Issue Date 05/2023



David Piecuch
UL Mark Certification Program Manager

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact UL Solutions Customer Service at <https://www.ul.com/contact-us>.

